Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) A switched mode power supply assembly comprising a plurality of at least two switched mode power supply modules coupled to each other in a ring-configuration;
each power supply module comprising synchronization control means for generating a synchronization control signal for a next neighboring module and for receiving an incoming synchronization control signal from a previous neighboring module in order to ensure interleaved operation of all modules without any one power supply module determining a synchronization of the power supply assembly.

2. (Previously Presented) The switched mode power supply assembly according to claim 1, wherein all power supply modules are mutually identical.

3. (Previously Presented) The switched mode power supply assembly according to claim 1, wherein each power supply module comprises a target signal input, all target signal inputs of all power supply modules being connected in parallel to one common target signal source.

4. (Previously Presented) The switched mode power supply assembly according to claim 1, wherein each power supply module comprises a current output, all current outputs of all power supply modules being connected in parallel to one common assembly output.

5. (Previously Presented) The switched mode power supply assembly according to claim 1, wherein each power supply module comprises a first supply input and a second supply input, all first supply inputs of all power supply modules being connected in parallel to one common high voltage supply source, and all second supply inputs of all power supply modules being connected in parallel to one common low voltage supply source.

6. (Previously Presented) The switched mode power supply assembly according to claim 1, wherein each power supply module comprises a control input and a control output, all control inputs being coupled to a control output of a previous neighboring module, and all control outputs being coupled to a control input of a next neighboring module.

7. (Previously Presented) The switched mode power supply assembly according to claim 1, wherein each power supply module further comprises a current sensor for generating a measuring signal representing the output current at said module output; wherein each power supply module further comprises current generating means being capable of operating in a first operative state in which said current generating means generates an output current having positive derivative and being capable of operating

in a second operative state in which said current generating means generates an output current having negative derivative;
said current generating means being adapted to switch from its first operative state to its second operative state when a rising measuring signal becomes equal to a high boundary signal, and being adapted to switch from its second operative state to its first operative state when a falling measuring signal becomes equal to a low boundary signal;
wherein each power supply module further comprises a hysteresis control stage.

8. (Previously Presented) The switched mode power supply assembly according to claim 7, wherein each power supply module comprises a boundary generator having an input coupled to a target signal input, adapted to generate a high boundary signal at a first boundary generator output and to generate a low boundary signal at a second boundary generator output on the basis of a target signal received at said input;
wherein said hysteresis control stage is adapted to control a difference between a rising measuring signal and said high boundary signal and adapted to control a difference between a falling measuring signal and said low boundary signal.

9. (Previously Presented) The switched mode power supply assembly according to claim 8, wherein said hysteresis control stage has a first input coupled to the first boundary generator output and a second input coupled to the second boundary generator output of the boundary generator for receiving the high boundary

signal and the low boundary signal, respectively, and having a first output for providing a hysteresis-controlled high boundary signal and a second output for providing a hysteresis-controlled low boundary signal, respectively.

10. (Previously Presented) The switched mode power supply assembly according to claim 9, wherein said hysteresis control stage comprises a first ramp voltage generator for generating a first ramp voltage having an increasing magnitude, and means for reducing the high boundary signal by the magnitude of said first ramp voltage.

11. (Previously Presented) The switched mode power supply assembly according to claim 9, wherein said hysteresis control stage comprises a second ramp voltage generator for generating a second ramp voltage having an increasing magnitude, and means for increasing the low boundary signal by the magnitude of said second ramp voltage.

12. (Previously Presented) The switched mode power supply assembly according to claim 7, wherein each power supply module comprises a control input and a control output, each control input being coupled to a control output of a previous neighboring module, and each control output being coupled to a control input of a next neighboring module;
each power supply module further being adapted to generate at its power supply output a first control output signal for indicating the moment in time when said current generating means switches from

its first operative state to its second operative state, and to generate a second control output signal for indicating the moment in time when said current generating means switches from its second operative state to its first operative state.

13. (Previously Presented) The switched mode power supply assembly according to claim 12, wherein the hysteresis control stage comprises a first adder having one input coupled to the first output of the boundary generator and having another input coupled to an output of a ramp voltage generator which is triggered by the first control input received at the control input of the corresponding power supply module, the first adder having its output coupled to the first output of the hysteresis control stage for providing the hysteresis-controlled high boundary signal.

14. (Previously Presented) The switched mode power supply assembly according to claim 12, wherein the hysteresis control stage comprises a second adder having one input coupled to the second output of the boundary generator and having another input coupled to an output of a ramp voltage generator which is triggered by the second control input received at the control input of the corresponding power supply module, the second adder having its output coupled to the second output of the hysteresis control stage for providing the hysteresis-controlled low boundary signal.

15. (Previously Presented) The switched mode power supply assembly according to claim 7, wherein said current generating means comprise:

two controllable switches coupled in series between a first supply input and a second supply input, a node between said switches being coupled to said module output;

a switch driver having outputs coupled to control inputs of respective switches, the switch driver being capable of operating in a first operative state in which it generates its control output signals such that the second switch is non-conductive while the first switch is in its conductive state, and being capable of operating in a second operative state in which it generates its control output signals such that the first switch is non-conductive while the second switch is in its conductive state;

a window comparator having a high boundary input and a low boundary input, a control output coupled to a control input of said switch driver, and a measuring signal input coupled to receive said measuring signal from said current sensor;

wherein the window comparator is adapted to generate a first control signal commanding said switch driver to enter its first operative state when said falling measuring signal becomes equal to the signal level at its low boundary input, and to generate a second control signal commanding said switch driver to enter its second operative state when said rising measuring signal becomes equal to the signal level at its high boundary input.

16. (Previously Presented) The switched mode power supply assembly according to claim 15, wherein said window comparator has its inputs coupled to the outputs of the hysteresis control stage.

17. (Previously Presented) The switched mode power supply assembly according to claim 7, wherein said current generating means comprise:
a controllable switch and a diode coupled in series between a first supply input and a second supply input, a node between said switch and said diode being coupled to said module output;
a switch driver having an output coupled to the control input of the switch, the switch driver being capable of operating in a first operative state in which it generates its control output signal such that the switch is in its conductive state, and capable of operating in a second operative state in which it generates its control output signal such that the switch is non-conductive;
a window comparator having at least one boundary input, a control output coupled to a control input of said switch driver, and a measuring signal input coupled to receive said measuring signal from said current sensor;
wherein the window comparator is adapted to generate a control signal for said switch driver when said measuring signal becomes equal to the signal level at its at least one boundary input.

18. (Previously Presented) Switched mode power supply assembly according to claim 1, wherein the power supply modules are implemented as DC/DC converter modules.

19. (Previously Presented) Switched mode power supply assembly according to claim 1, wherein the power supply modules are implemented as DC/AC inverter modules.

20. (Previously Presented) Solar cell assembly, comprising a boost converter for up-converting the output voltage of the solar cells, having its output voltage coupled to a DC/AC inverter, wherein either said boost converter or said inverter, or both, comprise a switched mode power supply assembly according to claim 1.

21. (Previously Presented) Driver for driving a lamp such as a gas discharge lamp, comprising a switched mode power supply assembly according to claim 1 as a DC/AC inverter for generating supply current for the lamp.

22. (Previously Presented) Actuator for a motion control apparatus, comprising a switched mode power supply assembly according to claim 1.